AMENDMENTS TO THE SPECIFICATION

Please add the following paragraph to page 1 after the Title of the Invention:

This is a Divisional Application of U.S. Application Serial No. 09/975,188, filed October 12, 2001, which is a Divisional Application of U.S. Application Serial No. 09/136,934, filed August 20, 1998, which is now U.S. Patent No. 6,335,814.

Please amend the paragraph beginning on page 13, line 22 as follows:

A thirteenth aspect is an aspect according to the eleventh aspect, wherein

the interference portion comprises:

an optical branch portion for branching the inputted optical signal into a first optical signal and a second optical signal;

an optical delay portion for providing the second optical signal outputted from the optical branch portion with a predetermined delay; and

an optical combining portion for combining the first optical signal outputted from the ~~second~~ optical branch portion and the second optical signal outputted from the optical delay portion.

Please amend the paragraph beginning on page 18, line 5 as follows:

As described in the foregoing, in the twentieth aspect, the center angular frequency of the angle-modulated signal and the predetermined difference in propagation delay in the interference portion are set at ~~optical~~ optimal values, to increase demodulation efficiency.

Please amend the paragraph beginning on page 28, line 21 as follows:

As described in the foregoing, according to the forty-seventh aspect, an angle-modulated signal is converted into an optical signal and branched into a plurality of optical signals, a part of the optical signals are subjected to homodyne detection by the interference portion and the first optical/electrical converting portion to reproduce the original electrical signal for the angle modulation as described in the first aspect and the remained part of the optical signals are subjected

to direct detection by the second optical/electrical converting portion to reproduce the angle-modulated signal. Thereby, if a wired network is constructed by using an optical fiber as its backbone and the angle-modulated signal outputted from the second optical/electrical converting portion is sent out in the air as a radio wave, the optical transmission system can expand to a wireless network for mobile terminals and the like. Especially, a high-frequency signal such as a microwave, a ~~millimetre~~ millimeter wave and the like, which is thought as an suitable signal for a wireless network, is received and subjected to demodulation, in a wired system, by a low cost configuration with optical signal processing and at the same time a radio wave is sent to the mobile terminals and the like, so that a flexible and greatly economical system can be constructed.

Please amend the paragraph beginning on page 78, line 21 as follows:

As described in the foregoing, the optical transmission system in FIG. 17 converts an angle-modulated signal into an optical signal to branch the optical signal into a plurality of optical signals, reproduces an original electrical signal for the angle modulation from each of some of these optical signals, using the interference portion 6 and the first optical/electrical converting portion 4, as described in the first embodiment and subjects the other of these optical signals respectively to square-law detection in the second optical/electrical converting portion 4' to reproduce an angle-modulated signal. This can construct a wired network using an optical fiber as a backbone and can also integrate the optical transmission system, if, for example, the angle-modulated signal outputted from the second optical/electrical converting portion 4' is sent out in the air as a radio wave, with a wireless network for mobile terminals and the like. Especially, in the case of utilizing a high-frequency, a microwave, a ~~millimetre~~ millimeter wave and the like, which is thought as an effective signal for a wireless network, the angle-modulated signal is received and subjected to demodulation to be the original electrical signal by a low cost configuration with optical signal processing in a wired system and at the same time it is sent to mobile terminals and the like as a radio wave. Thereby, a flexible and economical system can be constructed.